

# TERRA TREES

## Intorduction

TerraTrees Plugin Can Place Any Kind Of Vegetation On Terrain Just The Way They Are In Real World. You Can Achieve The Most Complicated And Realistic Scenes By Using Options Such As: Placement Based On Maps, Single Or Multiple Tree Type Selection, Tree Model Variations In Size, Color, Position, Density And Total Number, Environment Settings Which Includes Steepness Range & Elevation Range For Placement And etc.

TerraTrees Placement Is Based On 3 Conditions:

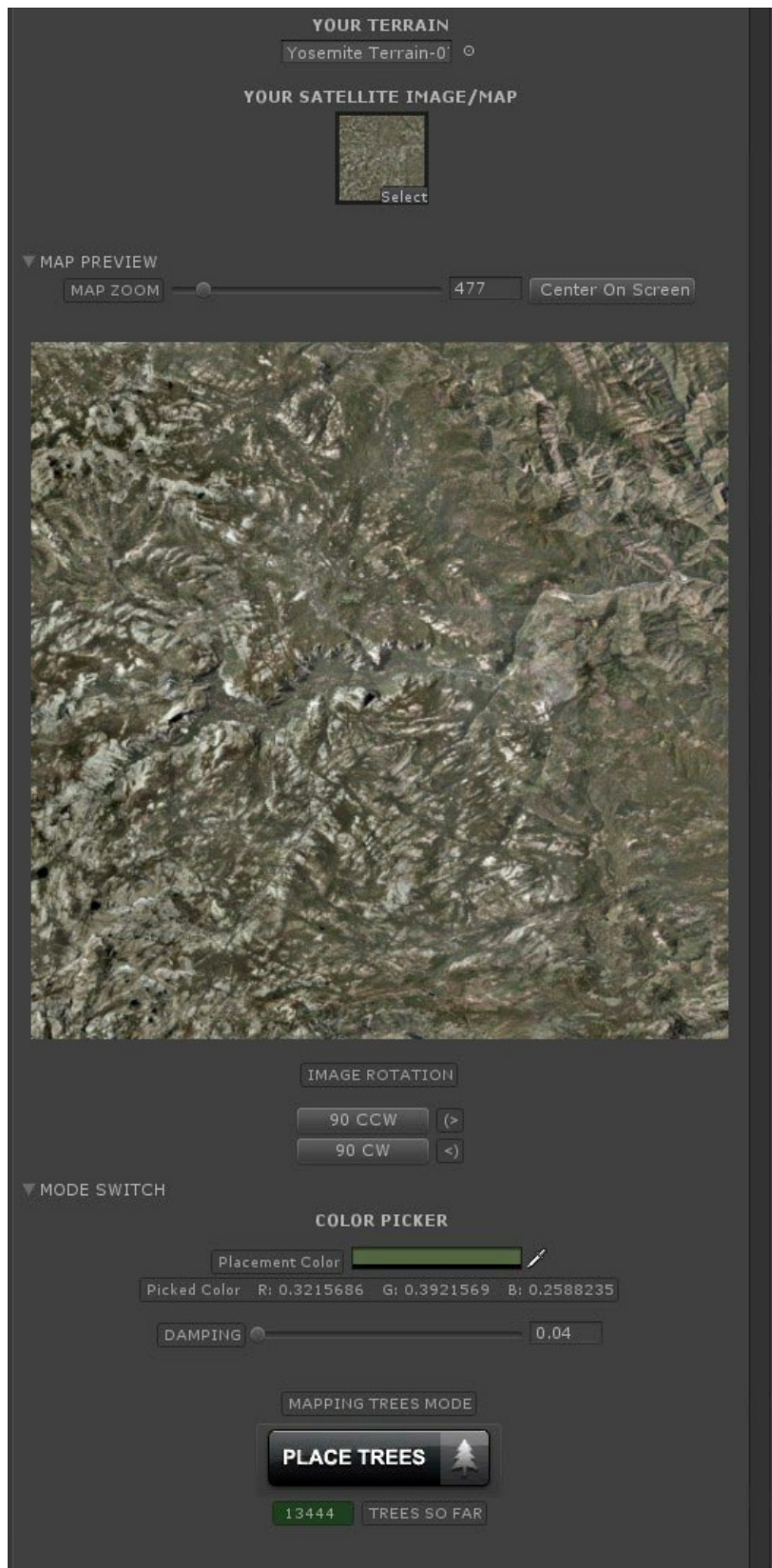
**INTELLIGENT TREES:** No need for Vegetation Maps, TerraTrees will use Terrain area's Satellite Image as the map to detect vegetation areas based on an automatic process.

**MAPPING TREES:** You need A Vegetation Map whether created by you yourself in Image Editing Programs or got them by available online/offline resources which produce these maps. Then you have to select Color Picker to assign vegetation areas.

**NORMAL TREES:** No Images or Maps required at all. It's an option if you want your vegetation to take place on the entire terrain.

## Terrain & Map

- Important** Insert The Terrain That Has To Be Filled With Vegetation
- Important** Insert The Satellite Image/Tree Map For Vegetation Zones
- Optional** Enable/Disable "MAP PREVIEW" And Zoom In And Out To Check The Map
- Optional** Rotate The Image 90 Degrees CCW (Counter Clock Wise) If You Haven't Done That Already
- Optional** Enable "MODE SWITCH" If You Want To Switch To "MAPPING TREES" Mode Or Leave It Disabled For "INTELLIGENT TREES" Mode
- Optional** If You Are In "MAPPING TREES" Mode, Pick Desired Placement Color With Favorable Damping Factor
- Important** Press "PLACE TREES" When You Are Satisfied With The Settings



## Vegetation Preview

In "VEGETATION PREVIEW" You Can Control Terrain Trees Settings For Preview

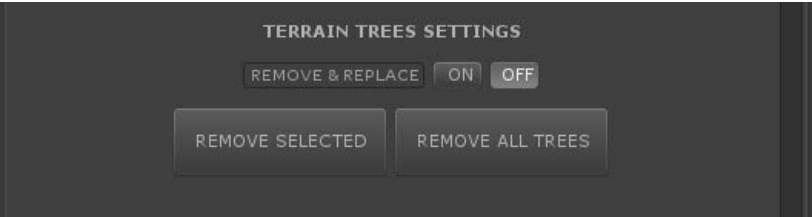
- Optional** Activate/Deactivate Vegetation Preview
- Optional** Turn On/Off To Show Or Hide Trees On Terrain
- Optional** Set Terrain Trees View Distance
- Optional** Set Terrain Trees Billboard Start
- Optional** Set Terrain Trees Fade Length
- Optional** Set Terrain Trees Max Mesh Models
- Optional** Turn On/Off "ADVANCED MODE" To Run/Bypass Unity Editor Undo Operations



## Terrain Trees Settings

Options To "Remove & Replace", "Remove Selected", "Remove All" And "Keep & Add" Vegetation On Terrain

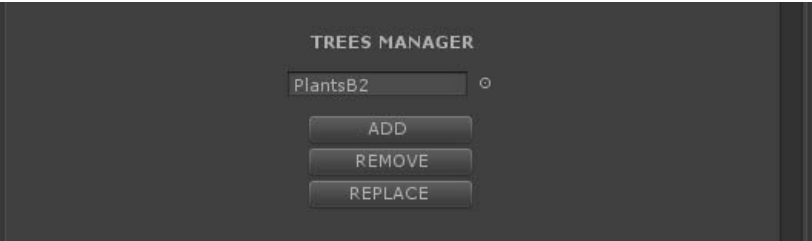
- Optional** Turn On/Off "REMOVE & REPLACE" While Placing New Trees On Terrain
- Optional** Press "REMOVE SELECTED" To Remove Placed Vegetation Type Selected In Preview Pane
- Optional** Press "REMOVE ALL TREES" To Remove All Placed Vegetation Models From Terrain



## Trees Manager

"TREES MANAGER" Will Control Terrain System Tree Prototypes By 3 Options Of "Add", "Remove" And "Replace".

- Important** Insert Vegetation Model For Adding To The Terrain System
- Important** Press "ADD" To Add The Inserted Vegetation Model To The Terrain System
- Optional** Press "REMOVE" To Remove Preview-Selected Vegetation Model From Terrain System
- Optional** Press "REPLACE" To Remove Preview-Selected Vegetation Model From Terrain System



# Tree Selection

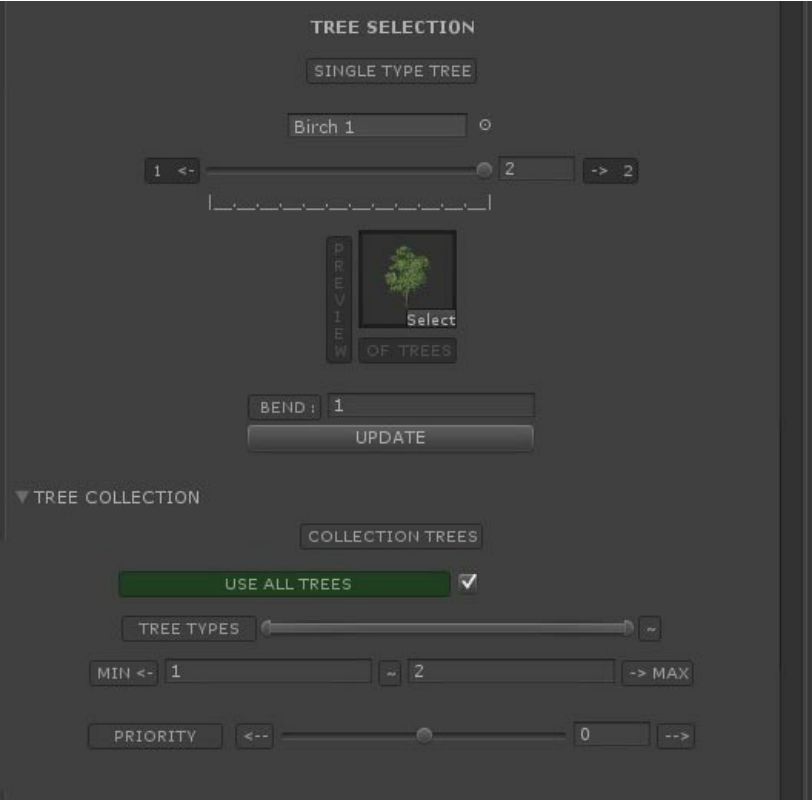
Here You Can Preview Terrain System Tree Models And Choose Between "Single" & "Collection" Trees For Single Or Multiple Simultaneous Tree Placement.

- Optional

Slide Through Terrain Trees To See Preview & Tree Bending Of The Selected Model
- Important

Turn On/Off "TREE COLLECTION" To Switch Between Single Or Multiple Simultaneous Tree Placement
- Optional

Enable "USE ALL TREES" Or Manually Select Mn/Max Tree Types With Priority Option From The List



# Tree Variation

There Are Various Random Algorithms To Change The Placement And Shape Of Vegetation Models.

- Important

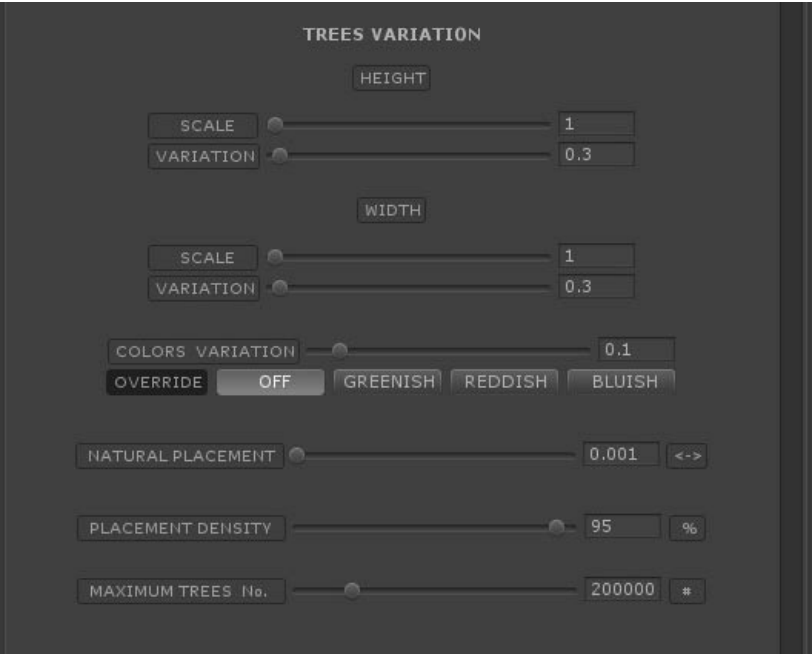
Set Width/Height Initial Scale & Variation For The Placing Trees
- Important

Set "Colors Variation" Factor With "OVERRIDE" Feature To Switch Between Off, Greenish, Reddish And Bluish
- Important

Set "NATURAL PLACEMENT" Value To Increse/Decrease Random Position Of Placing Trees - 0 Means Row Placement
- Important

Set Placement Density Percentage
- Important

Set Maximum Number (Limit) Of Placing Trees



# Environment Settings

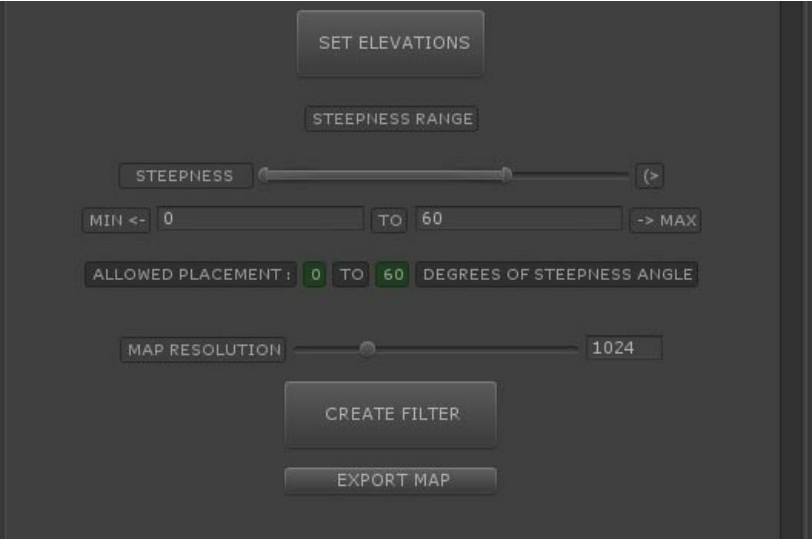
To Get The Most Realistic Scenes Which Include Vegetation, There Are 2 Main Options Of "STEEPNESS RANGE" & "ELEVATION ZONE" To Set Them For The Scene.



## Steepness Range

Define A Steepness Range And Select Minimum And Maximum Steepness Degrees Which Vegetation Placement Will Occur Over Those Areas On Terrain.

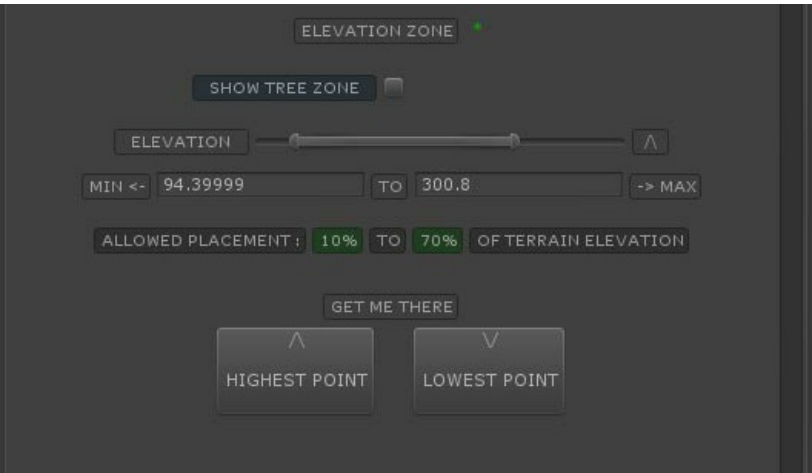
- Important** Press "SET ELEVATIONS" To Activate "ENVIRONMENT SETTINGS" And Calculate Elevations
- Important** Set "Steepness Range" Which Placement Is Allowed In This Steepness Degrees Range
- Important** Select Desired "Steepness Filter" Resolution And Press "CREATE FILTER" To Show Placement Zones On Terrain In Editor
- Important** Press "EXPORT MAP" To Export "Steepness Map" As APNG Image File With Specified Resolution



## Elevation Zone

Define An Elevation Range And Select Minimum And Maximum Elevations Which Vegetation Placement Will Occur Over Those Areas On Terrain.

- Important** Show/Hide Tree Zone Set By "Elevation Range"
- Important** Set "Elevation Range" Which Placement Is Allowed In This Elevation Range
- Important** Press "HIGHEST POINT" or "LOWEST POINT" To Take The Editor Camera To The Highest/Lowest Point On Terrain



# Update Vegetation

This Will Update All Vegetation Models On Terrain That Has Been Changed.

**Important** Press "UPDATE" To Update Any Changes Made To Terrain Vegetation



# Settings

TerraTrees Settings

- Optional** Enable/Disable "Normal Tree Placement On Entire Terrain" (NORMAL TREES MODE)
- Optional** Enable/Disable "Show Console Hints" In Unity Editor Log Messages

